



## MPR E-Scan | Chemical

HYBRID-DIGITAL REFRACTOMETER



### WORLD'S MOST RUGGED IN-LINE PROCESS REFRACTOMETER

- ▶ Stainless-steel CNC machined sensing head
- ▶ Sapphire Prism
- ▶ Daylight visible color display
- ▶ NEMA 4X Fiberglass Electronics Console
- ▶ 4-20mA & RS-232 outputs
- ▶ (2) Input & (6) Configurable output relays
- ▶ In-house manufactured in USA
- ▶ 24 Hour Service Support

The MPR E-Scan is a hybrid-digital critical angle refractometer. It is used to measure the refractive index of process fluids and may be used as an error indicator or an integral part of a complete process control system.

With an extremely durable Sapphire prism as its foundation, the hybrid-digital design provides digital accuracy with rugged components in the sensing head. This combination produces the essential dependability required for years of use when installed in harsh industrial environments.

#### TYPICAL APPLICATIONS

Sulphuric, Hydrochloric, Boric & Phosphoric Acid

Sodium Hydroxide & Carbonate  
Machine Coolant

Ethanol, Urea & Glycol

DMAC, PVOH, NaSCN & PVA

Hydrogen Peroxide

Oleum

#### OPTIONS

Standard or Extended Probes

Various alloys for wetted parts,  
(Alloy-20, Hastelloy C, Tantalum & etc.)

Intrinsically Safe

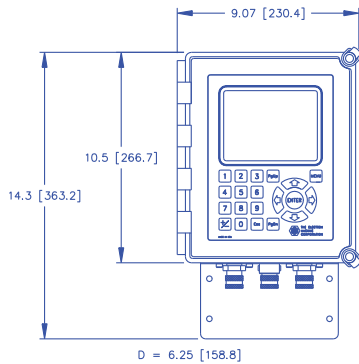
HART Protocol, RS-422/484, &  
Isolated 4-20mA outputs

**Model MPR E-Scan : Standard Features**

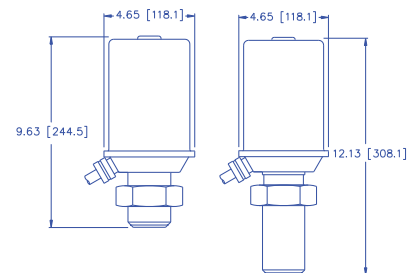
Accuracy/ Repeatability	±0.05 BRIX (.000075 R.I.) or .5% of span
Response Time	0.25 seconds to 3 minutes
Span	Configured for specific application for max. resolution
Display	Color TFT-LCD with LED backlighting 640 X 480 Pixel, daylight-readable
Process Temperature	Up to 150°C (300°F) without air purge
Sensing Head Wetted Materials	2205 Full Duplex S/S, Sapphire, Peek® or VITON®
Service/Support	24HR Technical hotline and fast response for repairs/parts
Standard Outputs	4-20mA non-isolated, 0-10 Vdc non-isolated, RS-232 (6) configurable output relays & (2) configurable input relays
Interconnecting Cable	6M (20FT) standard 300M (1000FT) maximum

**Model MPR E-Scan : Optional Features**

Sensing Head Wetted Materials	Alloy-20, Hastelloy C, Tantalum
Outputs	HART® Protocol, RS-422/484, & Isolated 4-20mA for (temperature, measurement or control)
Vortex cooled electronics console, Intrinsically safe & Severe duty for extreme vibration/heat	



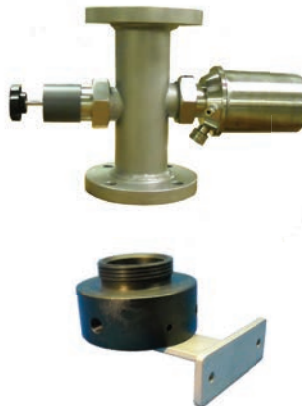
**Standard Extended**



Lined Adapter



Spool Adapter with Hand Cleaner



In-Line NPT Adapter



Polyurethane Adapter

